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10/698,804	10/31/2003	Howard C. Simonson	07844-0631001	2491

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EXAMINER	
BELOUSOV, ANDREY	
ART UNIT	PAPER NUMBER
2174	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary	Application No.	Applicant(s)	
	10/698,804	SIMONSON ET AL.	
	Examiner	Art Unit	
	ANDREY BELOUSOV	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 April 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23,32-42 and 44-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15,17-23,32-42 and 44-52* is/are rejected.

7)☒ Claim(s) *16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in responsive to the amendment filed on 4/20/2011. Claims 1-23, 32-42, 44-52 are pending and have been considered below.

Allowable Subject Matter

Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 38 and 48 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 38 and 48 recite the limitation "the sort directions" and “the sort key directions.” There is insufficient antecedent basis for these limitations in the claims.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6-7, 11-18, 20-23, 32-42, and 44-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Outlook (Microsoft Outlook 2000, Copyright 1995-1999, Fig. 1.)

Claim 1, 32, 44: Outlook discloses a computer program product tangibly embodied on machine-readable storage device, the product comprising instructions operable to cause data processing apparatus to:

a. display a table of data having a plurality of rows or a plurality of columns (Fig. 3, showing various columns and rows: name, type, size, modified, created, in Folder, etc.) as an element of a graphical user interface display and display a set of markers (Fig. 3: e.g. name, size, type), each marker being associated with a row of the table or each marker being associated with a column of the table (Fig. 3, each of the name, size and type corresponds to their column), the table of data having a plurality of sort keys having a specified sort key order (Fig. 3-7, the markers can be dragged to a “Drag a column header here to group by that column” area for sorting) including a most significant sort key (Fig. 7: Name, the top most marker indicates the most significant sort key), each sort key being a row or each sort key being a column of the table (the sort keys in Fig. 7, correspond to the data in their respective columns of the table from Fig. 3), each

sort key having a sort direction (Fig. 7, triangles), each sort key having a position in the sort key order (Fig. 7, name, then size, then type, as shown graphically);

b. receive from the user an input gesture selecting a marker, (Fig. 8, selection gesture is performed by clicking and dragging one of the possible markers (e.g. 'Type' marker) so as to constitute a selection of that one marker from many) where the selected marker remains within the table of data (Fig. 9: the 'Type' marker remains associated with a column or row within the table of data);

c. establish the row or column associated with the user-selected marker as the most significant sort key (Fig. 9, shows the sort key order as it is after the drag is performed, now the type marker is at the top, while name and size is pushed down the chain) in the sort key order in response to the input gesture selecting the marker and where establishing the row or column as the most significant sort key includes maintaining the sort direction (Fig. 9, name, size and type are kept in ascending order as evidenced by the triangles) from the sort key order, and maintain the positions and sort directions of two or more remaining sort keys in the sort key order (Fig. 8-9, size which followed name, is still after name);

d. sort the respective rows of columns of the table of data according to the plurality sort keys, the sort key order, and the sort key directions in response to the input gesture (Fig. 8-9, the table of data is sorted first by type as shown by "Folder" type at the top, then by name, and last by size); and

e. display the sorted table of data wherein displaying the sorted table of data includes displaying the table of data including the same plurality of rows or the

plurality of columns where content of the table of data has been sorted (the sorted data is automatically displayed including the same rows as shown in Fig. 8-9.)

Claim 2, 33: Outlook discloses the product of claim 1, wherein the user input gesture is a selecting gesture for selecting the marker (Fig. 8.)

Claim 3: Outlook discloses the product of claim 1, wherein the user input gesture comprises a pointing device action on the marker (Fig. 8.)

Claim 4: Outlook discloses the product of claim 1, wherein the user input gesture is a mouse click on the marker (Fig. 8.)

Claim 6, 35, 45: Outlook discloses the product of claim 1, further comprising instructions to: represent the sort key order visually in the table by displaying the markers with a pattern of distinct visual properties (Fig. 8, by using position to indicated order.)

Claim 7: Outlook discloses the product of claim 6, wherein the pattern of distinct visual properties indicates the sort key order (Fig. 8, the lower in the page the markers are in relation to others, the less significant it is.)

Claim 10: Outlook discloses the product of claim 6 wherein the pattern of distinct visual properties comprises a set of distinct non-textual representations identifying a sequence of each sort key in the sort key order (Fig. 8.)

Claim 11, 37, 47: Outlook discloses the product of claim 1, further comprising instructions to:

determine whether the user-selected marker is associated with the most significant key and if the user-selected marker is associated with the most significant key, change a sort direction of the most significant key (Fig. 12, clicking on the markers changes the sort direction, the triangles flips over), and if the user selected marker is not associated with the most significant key, establish the row or column associated with the user-selected marker as the most significant sort key responsive to the user selection of the marker (Fig. 7-9, Outlook includes instructions that at any point, including when the marker is not most significant sort key, the users may at their discretion change the order, by following the methodology as described in relation to claim 1. The “establish the row or column” portion of the instructions that this claim recites to, does no limit whether the “establishing” is in response to user action, or other automatic computer action, merely that there exist instructions (i.e. code capable for that to be done)), and maintain the positions and the sort directions of the remaining sort keys in the sort key order (Fig. 9.)

Claim 12, 34, 20, 39, 49: Outlook discloses the product of claim 1 wherein the user input gesture is a dragging gesture for selecting the marker by dragging the marker to an area on the graphical user interface display (Fig. 7-9.)

Claim 13: Outlook discloses the product of claim 12 wherein the area on the graphical user interface display comprises an icon (Fig. 8.)

Claim 14: Outlook disclose the product of claim 12 wherein the area on the graphical user interface display comprises a sort key list window (Fig. 8, top portion right under Local Disk (C:).)

Claim 15: Outlook discloses the product of claim 1, wherein the number of sort keys in the sort key order for the table of data is limited to a predetermined number greater than one (number of column headers, i.e. the grouping is limited to a preprogrammed set of column headers, Fig. 8; grouping is limited to four, Fig. 13.)

Claim 18: Outlook discloses the product of claim 1, wherein the marker is a column header (Fig. 3, 7.)

Claim 21, 40, 50: Outlook discloses the product of claim 20 wherein the area of the graphical user interface display is an icon, the product further comprising instructions to:

a. receive from the user an input gesture selecting the icon, the icon being associated with a separate sort key list window (Fig. 8-9); and
b. display, in the separate sort key list window on the graphical user interface display, a list of sort keys comprising the one or more sort keys for the table of data having a sort key order including the most significant sort key (Fig. 8-9.)

Claim 22, 41, 51: Outlook discloses the product of claim 20 wherein the area of the graphical user interface display is a separate sort key list window, further comprising instructions to: display in the separate sort key list window, a list of sort keys comprising the one or more sort keys for the table of data having a sort key order including the most significant sort key (Fig. 8.)

Claim 23, 42, 52: Outlook discloses a computer program product tangibly embodied on machine-readable storage device for interacting with a user, the product comprising instructions operable to cause data processing apparatus to:

a. display a table of data having a plurality of rows or a plurality of columns (Fig. 7) as an element of a graphical user interface display, and display a set of markers (Fig. 7: name, size, type), each marker being associated with a row of the table or each marker being associated with a column of the table (Fig. 3), the table of data having a plurality of sort keys having a specified sort key order including a most significant sort key (Fig. 7), each sort key being a row or each sort key being a column of the table, each sort key having a sort direction (Fig. 7,

triangles), each sort key having a position in the sort key order (Fig. 7, name, then size, then type);

b. receive from the user one input gesture selecting a marker by dragging the marker from location associated with a particular row or column of the table to a location within an area of the graphical user interface display (Fig. 7-9);

c. establish the row or column associated with the user-selected marker as a sort key having an intermediate position in the sort key order defined by the location within the area in response to the input gesture (Fig. 11-12) including maintaining the sort direction from the sort key order, and maintain the positions and sort directions of the remaining sort keys in the sort key order including a most significant sort key and a least significant sort key (Fig. 11-12);

d. sort the respective rows or columns of the table of data according to the plurality of sort keys, the sort key order, and the sort key directions in response to the input gesture (Fig. 11-12); and

e. display the table of sorted data, wherein displaying the sorted table of data includes displaying the table of data including the same plurality of rows or the plurality of columns where content of the table of data has been sorted (the sorted data is automatically displayed including the same rows as shown in Fig. 12.)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Outlook.

Claim 5: Outlook discloses the product of claim 1. Outlook shows the use of a single click to as user input gesture. Outlook does not explicitly disclose wherein the user input gesture is a double mouse click on the marker. The Examiner takes Official Notice that it is old and well known in the computing art to use a double click in lieu of a single click for selection. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a double click. One would have been motivated to use a double click method of selection so as to meet the expectations of Window OS users.

Claim 19: Outlook discloses the product of claim 1. However Outlook does not explicitly disclose wherein the marker is a row header. The Examiner takes Official Notice that it is old and well known in computing arts to use row headers. One would have been motivated to use row headers as opposed to column as it would be have been a mere

mechanical rearranging of parts (from column to row) of an invention involving only routine skill in the art. In re Japikse, 86 USPQ 70.

5. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Outlook in view of Lane et al., (5,704,051.)

Claim 8, 9: Outlook discloses the product of claim 6. However, Outlook does not explicitly disclose wherein the pattern of distinct visual properties comprises a set of distinct colors. Lane discloses a graphical user interface including color coding using a pattern of distinct visuals properties comprising a set of distinct colors (5:57-61.) Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a well known technique of color coding patterns to improve similar graphical user interfaces of Lane and Outlook in the same manner to yield a predictable result of a graphical user interface that utilize color in a meaningful way to readily convey useful information to the user, as suggested in Outlook.

Response to Arguments

Applicant's arguments filed 4/20/2011 have been fully considered but they are not persuasive.

Applicant argues that the dragging operation as disclosed in Outlook does not select. The Applicant implies that this "selection" can only be performed by either a single-click or a double-click of the marker. The Examiner respectfully disagrees. Claim

1 as recited, indicates only that a selection is performed by a certain gesture without going into detail what such a gesture would entail. The Examiner asserts that a gesture operation of dragging a marker, out of several others that are present, to another location falls within 'selection' of that particular marker out of several others that are present and could likewise have been dragged for selection so as to perform a certain function with that particular marker, and not the others. Applicant's amendments of 4/20/2011 does not remedy the question as to the format used in "display[ing] a table of data having a plurality of rows or a plurality of columns as an element of a graphical user interface display." A plain language reading of this limitation is open to two broad, reasonable interpretations. First is that the format (though not explicitly stated) is a table format having rows or columns; and second (taken by Examiner) is that as there is no explicit recitation of a format of the element displayed for the table of data, then any format that is suitable for displaying a table of data as a GUI element would suffice.

Applicant further argues that the sort directions are default sort directions and as such are maintained regardless of changes to the significant sort key, and therefore the figures are insufficient to teach the claimed feature. The Examiner respectfully disagrees. Regardless of whether the sort directions are maintained as a result of default direction being maintained, or otherwise, it is sufficient that at least in one scenario the sort directions are maintained, so as to read upon the claims. Under the scenario sought by the Applicant, if the markers were to maintain or revert to default, it would not make any difference because Outlook discloses at least one case where the directions are maintained (regardless by what logic.)

Applicant further argues that Outlook does not disclose displaying the sorted table of data. The Examiner respectfully disagrees. Fig. 8 and 9 of Outlook displays a table of data stacked in rows. Claim 1 as recited does not indicate as to the format of the display of the data from the sorted table. Whether the data should be in the same format with the same number of columns and arranged in the same fashion as the previous "table of data" after the sorting is also not indicated in claim 1. A sorting operation is a logical operation on a table of data in a database. The resulting data from that sorted table can be displayed in many ways, including the format as disclosed in Fig. 8 and 9.

Applicant further argues that Outlook does not disclose or suggest removing the least significant key based on the determination. The Examiner respectfully disagrees. Though the claims recite instructions for "determining," the subsequent "when" actions with respect to associated user-selected markers are not recited to be in "response" or "based" on such a determination, but merely in the cases where the key is or not in the sort key order. Column markers previously dragged over to the grouping area, such as Type in Fig. 6-7 are removed as choices for further grouping, Fig. 7, which indicates a determination of whether such markers are associated with a sort key in the sort key order.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Belousov whose telephone number is (571) 270-1695. The examiner can normally be reached on Mon-Fri (alternate Fri off) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Chow can be reached on (571) 272-7767. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3800.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven P Sax/
Primary Examiner, Art Unit 2174

/AB/
7/16/2011